

Jian-ping WANG

Curriculum Vitae



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EDUCATION

2020 – NOW **Undergraduate**
LU JIAXI TALENT PROGRAM IN CHEMISTRY
Department of Chemical Physics
University of Science and Technology of China

Overall GPA: 3.74/4.30 **Ranking:** 9/129

Major: Chemical Physics

Selected Courses: Physical Chemistry (I - 88, II - 96)
Inorganic Chemistry (91)
Chemistry Principle (93)
Electromagnetism (91)
Complex Variables Functions (91)
Mathematical Physical Equations (94)
Computer Programming A (93)

RESEARCH

Design and Performance Regulation of UCl_3 -Type Solid-State Electrolytes with New-Type Rare Earth Halides

All-solid-state lithium-metal batteries are emerging as the core of a revolution in energy storage technology. We discover a new UCl_3 -type electrolyte, which holds one-dimensional ion-conduction structure. Based on UCl_3 -type crystal, I participate in experimental synthesis in order to improve ionic conductivity by ion doping. Furthermore, with the development of sodium-ion batteries, we hope to adapt this system to fit sodium-ion conduction.

Supervisor: Prof. Hong-bin YAO @ USTC

Supported by National Innovation Training Program for College students, Ministry of Education

Selected as **National Key Project**

Design of Li_3InCl_6 -Type Solid-State Electrolytes by Ab Initio Molecular Dynamics

Ab initio molecular dynamics (AIMD) simulation is widely employed in studying diffusion mechanisms and in quantifying diffusional properties of materials. In this research, we aim to calculate ionic conductivity of doped Li_3InCl_6 , and find the most optimized doping ratio. I participate in the AIMD Simulation for a certain metal dopant with VASP.

Supervisor: Prof. Yi-zhou ZHU @ WLU

A **Summer Research** in Westlake University

TEACHING ASSISTANT

2022 FALL **Chemistry Principle A**
Lectured by Prof. Yan-mei WANG

A course for first-year undergraduate students majoring in chemistry, mainly introducing some fundamentals of chemical thermodynamics, chemical kinetics and structural chemistry.

SELECTED AWARDS

- 2022 **Huang Minglong Scholarship of SIOC**
Shanghai Institute of Organic Chemistry, CAS
- 2021 **Excellent Student Scholarship of GIES**
Guangzhou Institute of Energy Conversion, CAS
- 2021 **Scholarship of Lu jiaxi Talant Program**
University of Science and Technology of China
- 2021 **3rd Prize in Electromagnetism Competition**
Office of Academic Affairs, USTC
- 2020 **Scholarship for Outstanding Freshmen**
University of Science and Technology of China

PUBLICATIONS

Lanthanum chloride hosted lithium superionic conductor with excellent electrode compatibility. submitted.

WORK EXPERIENCE

CURRENT, FROM APR. 2022 (PT)

Students' Traditional Crafts Association *Vice President*

This position involves building the rules and regulations of the association and planning regular activities, as one of the initiators.

CURRENT, FROM OCT. 2021 (PT)

Media Center of USTC *Member of Weibo Department*

This position involves daily operation of the official Weibo of USTC and the planning of featured topics.

CURRENT, FROM SEPT. 2020 (PT)

Volunteer Works *Volunteer*

Including the After-School Class for Primary School Students in Hupo Community and the Book Collation in Anhui Labrary, etc.

COMPUTER SKILLS

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|--------------|----------------------------------|
| BEGINNER | Material Studio, HTML, CSS |
| INTERMEDIATE | Linux, VASP, Matlab, Mathematica |
| EXPERT | Python, C, \LaTeX |